# Agenda Item No. 6.0



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#### **MEMORANDUM**

**To:** Transportation Committee

From: CMAP Staff

Date: November 8, 2019

Re: 2020 regional highway safety performance targets

State departments of transportation (DOTs) and metropolitan planning organizations (MPOs) are required to establish quantitative highway safety performance targets on an annual basis and use a set of performance measures to track progress toward meeting long-term targets for traffic safety.<sup>1</sup>

Each year, the process begins with State DOTs establishing their highway safety targets as part of their Highway Safety Improvement Program report to Federal Highway Administration (FHWA). MPOs have 180 days, from the date the State DOT submits its targets to FHWA, to set their own regional targets or agree to support the State DOT targets. IDOT set its annual safety performance measure (Safety PM) in July 2019 and the MPO Policy Committee and CMAP Board must act by January 2020 to set the region's targets. In order to meet this requirement, the CMAP Board and the MPO Policy Committee will need to affirm the highway safety targets at their January 2020 meetings.

This memorandum discusses why CMAP staff recommends that the Board and MPO support IDOT's 2020 safety targets and requests approval by the Transportation committee. By agreeing to support IDOT's highway safety targets, the MPO is not agreeing to any specific share of the decrease in fatalities and serious injuries. Instead it is agreeing to integrate the targets as goals in the metropolitan planning process and to plan and program projects that help meet the State's targets. The selection of the target does not directly affect the allocation of funding at either the state or MPO level. However, the targets selected for different measures should ultimately reflect funding allocation priorities among other factors.

<sup>&</sup>lt;sup>1</sup> The safety performance measure (Safety PM) requirements are set out in the Federal Highway Administration's National Performance Management Measures: Highway Safety Improvement Program final rule.

The remainder of this memo provides background on the safety PM rule, reviews IDOTs 2020 statewide highway safety targets, the staff recommendation to support of the state's 2020 safety targets, CMAP's local safety efforts, and next steps.

## **Background on Safety Performance Management Rule**

The Safety PM requires state DOTs and MPOs to establish safety targets as five-year rolling averages on all public roads for: (1) the number of fatalities, (2) the rate of fatalities per 100 million vehicle miles traveled (VMT), (3) the number of serious injuries, (4) the rate of serious injuries per 100 million VMT, and (5) the number of non-motorized fatalities and non-motorized serious injuries. Thus, the form of the 2020 target is the desired value of the 2016-2020 average for each of the measures. Injuries and fatalities from traffic crashes vary considerably from year to year due to numerous factors, and the five-year average is meant to smooth large changes.

The actual target should be set to what the state believes it can achieve;<sup>2</sup> the rule does not specify or provide guidance for how ambitious the targets are to be. Each year the FHWA evaluates whether states have met, or made significant progress toward meeting, their targets. FHWA will consider states to be in compliance if they have met or improved from the baseline at least four of the five required performance targets.

MPOs have the option to support any or all of the state's highway safety targets, develop its own highway safety targets for any or all individual measures. The MPO is also required to integrate the Safety PM into its planning process by including it in the metropolitan transportation plan (MTP), in CMAP's case, ON TO 2050. In addition, the MPO must show how investments in the transportation improvement program (TIP) help achieve the Safety PM targets.

#### **IDOT 2020 safety performance targets**

IDOT evaluated two methods to set the state's targets, a least squares trend line which approximates the actual trends, and a policy-based 2 percent annual reduction in the 5-year average. IDOT selected the method that returns the greatest decrease in the rolling five year average for each measure. Because of a back log for processing crash data, IDOT had to estimate the 2014-2018 five-year rolling average for serious injuries and non-motorized serious injuries and fatalities. For 2020, all targets use the policy-based 2 percent annual reduction in the 5-year rolling average.

<sup>&</sup>lt;sup>2</sup> The annual safety targets are designed to be interim targets that agencies should use to track their performance toward meeting long-term goals. According to FHWA guidance, state DOTs and MPOs are strongly discouraged from using aspirational goals, such as Towards Zero Deaths (TZD), when setting safety targets. While the FHWA agrees with a zero-fatality goal, and even supports the TZD initiative, the annual safety targets should enable agencies to tract progress towards their long-term goals. Setting reasonable targets allows agencies to see how changes in policy or funding have an effect on traffic safety, and if agencies are not meeting goals, allow them to alter how they approach safety.

Table 1. 2019 IDOT Statewide Highway Safety Performance Targets

		Proposed 2020 target				
	2010-	2011-	2012-	2013-	2014-	2016-2020 <sup>2</sup>
IDOT Safety Performance Target	2014	2015	2016	2017	$2018^{1}$	
Total Fatalities -Illinois	943.0	957.0	989.4	1,017.6	1,025.6	985.0
Fatality Rate VMT -Illinois	0.90	0.91	0.94	0.96	0.95	0.91
Total Serious Injuries -Illinois <sup>1</sup>	12,203.2	12,245.8	12,168.6	12,111.8	12,149.8	11,668.7
Serious Injury Rate per 100 mil. VMT -Illinois <sup>1</sup>	11.7	11.7	11.5	11.4	11.2	10.8
Non-Motorized Serious Injuries and Fatalities -Illinois <sup>1</sup>	1,468.4	1,515.8	1,498.8	1,526.8	1,516.2	1,456.2

<sup>1 - 2014-2018</sup> average estimated for serious injuries and non-motorized serious injuries and fatalities measures.

Because of its outsized share of the state's population and multimodal transportation system, the CMAP region greatly influences the safety performance trends at the statewide level. The region accounts for a little over 40 percent and 50 percent of the state's 5-year average for fatalities and serious injuries, respectively. When it comes to non-motorized fatalities and serious injuries, the CMAP region accounts for roughly 75 percent of the state's total. This is due to the high number of pedestrians and pedal-cyclists compared to the rest of the state.

Table 2. 2019 CMAP Share of IDOTs Highway Safety Performance Targets

		Proposed 2020 target				
	2010-	2011-	2012-	2013-	2014-	2016-2020 <sup>2</sup>
	2014	2015	2016	2017	$2018^{1}$	2010 2020
Total Fatalities -CMAP	401.4	405.8	425.8	443.8	452.6	434.7
Fatality Rate VMT -CMAP	0.69	0.69	0.72	0.75	0.76	0.72
Total Serious Injuries -CMAP <sup>1</sup>	6,502.2	6,642.8	6,662.8	6,720.8	6,733.0	6,466.3
Serious Injury Rate per 100 mil. VMT -CMAP <sup>1</sup>	11.1	11.4	11.3	11.3	11.2	10.8
Non-Motorized Serious Injuries and Fatalities -CMAP <sup>1</sup>	1,115.0	1,158.8	1,149.0	1,182.0	1,181.3	1,134.5

<sup>1 - 2014-2018</sup> average estimated for serious injuries and non-motorized serious injuries and fatalities measures.

## Recommendation for 2020 safety performance targets

Staff recommends that the MPO support IDOT's policy-driven 2020 highway safety targets. IDOT's aggressive highway safety targets reflect the need for, and a commitment to, reducing fatal and serious injury crashes. The region has made significant progress in reducing fatalities and serious injuries through engineering, education, and technology, but the region still faces

<sup>2 - 2%</sup> annual reduction in 5-year average.

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significant challenges to reduce the number of traffic related serious injuries and fatalities. By supporting IDOT's targets, the region will have a unified goal that supports making all roads in the region safer for all users. Given that the targets are set annually, CMAP can readily revisit target selection methodology each year.

## **CMAP local safety analysis and implementation**

To facilitate progress on regional and state highway safety targets, CMAP has incorporated highway safety into its programming decisions and work plan. The CMAQ and STP-L Shared Fund programs had safety incorporated into project evaluations and CMAP staff encouraged the eleven Council of Mayors STP project evaluation to include safety as a measure. In addition to programming activities, CMAP staff are engaged in many safety initiatives. CMAP staff are involved in IDOT's Traffic Records Coordinating Committee and the City's Vision Zero groups.

CMAP recently completed a project where CMAP, through IDOT funding, managed a project to help IDOT catch up on processing crash records to address a multi-year backlog. CMAP is also exploring the usRAP software that identifies safety deficiencies in roadway characteristics CMAP has also completed an analysis of safety related questions in the CMAP municipal survey and is seeking additional ways to encourage safety program implementation.

## **Next steps**

Following discussion and approval by the Transportation committee, staff will finalize its recommendation for the 2020 regional highway safety targets. The recommended 2020 highway safety targets will be brought to the CMAP Board and MPO Policy Committee in January for discussion and approval. If the safety targets are approved, staff will prepare a memo informing IDOT that the CMAP MPO agrees to support the 2020 statewide highway safety targets.

**ACTION REQUESTED: Approval** 

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